

### REMARKS

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

By this Amendment, claims 67, 74, and 75 are amended and new claims 81-86 are added. Claims 32-65 remain withdrawn. Claims 32-65, 67, 68, and 70-86 are now pending in the application.

In the Office Action, claim 75 was rejected under 35 U.S.C. § 112, second paragraph as failing to provide antecedent basis for a limitation in the claim; claims 67, 68, 73, 74, 76, and 78 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,317,587 to Ackley et al. ("Ackley"); claims 67, 68, 72-74, and 76-78 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,557,627 to Schneider et al. ("Schneider") in view of U.S. Patent No. 5,493,577 to Choquette et al. ("Choquette"); claims 70 and 71 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ackley in view of Hegblom et al., Electronic Letters, vol. 3 no. 9, April 1998 ("Hegblom"); claims 70 and 71 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schneider in view of Choquette and further in view of Hegblom; claims 75, 79, and 80 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ackley in view of U.S. Patent No. 5,812,581 to Cox; claims 75, 79, and 80 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schneider in view of Choquette and further in view of Cox; and claim 77 was rejected under U.S.C. § 103(a) as being unpatentable over Ackley in view of Schneider.

### **Rejection Under 35 U.S.C. § 112, Second Paragraph**

Claim 75 has been amended to address the § 112 rejection. Applicants submit that the claim is now in condition for allowance.

### **Rejection Under 35 U.S.C. §102(b)**

Applicant respectfully notes that a claim is anticipated under 35 U.S.C. § 102(a), (b), or (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Further, the identical invention must be shown in as complete detail as is contained in the claim. Finally, the elements must be arranged as required by the claim. *Manual of Patent Examining Procedure ("MPEP")* § 2131.

Applicants traverse the rejection of claims 67, 68, 73, 74, 76, and 78 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,317,587 to Ackley for at least the reason that the Examiner has failed to establish that Ackley discloses or suggest each and every element of the claimed invention. As amended herein, independent claim 67 recites “the insulation layer situated between the second mirror and the substantially equipotential layer such that the second mirror and the substantially equipotential layer are separated from each other.” However, the Examiner has not established that Ackley or any other reference discloses this limitation in combination with the other limitations of claim 67.

As to claim 74, the Examiner has asserted that Ackley discloses “... an upper contact portion disposed upon the equipotential layer outside the perimeter of the aperture (not shown but present to provide electrical current to the device. See col. 4, lines 16-17).” Applicant respectfully submits that the reliance of the Examiner on the cited portion of Ackley is misplaced. In particular, that portion states in part that “A transparent metal contact layer 46 is deposited in the emitting area and continued over mesa shaped area 40 to define an electrical window 42 and to provide efficient surface for an external electrical contact.” *Emphasis added.* Contrary to the characterization advanced by the Examiner then, Ackley plainly indicates that the “equipotential layer” purported by the Examiner to be disclosed there is, in fact, a “contact layer 46.” Moreover, Ackley also clearly states that the “contact layer” that the Examiner alleges is part of the Ackley optoelectronic device is, in fact, an external electrical contact. Thus, the

Examiner has failed to establish that any single device disclosed in Ackley includes all the limitations of claim 74.

Consistent with the foregoing discussion, Applicant respectfully submits that the Examiner has failed to establish that Ackley anticipates claims 67, 68, 73, 74, 76, and 78, at least because the Examiner has not established that each and every element as set forth in those claims is found in Ackley, because the Examiner has not established that the identical invention is shown in Ackley in as complete detail as is contained in the claims, and because the Examiner has not established that Ackley discloses the elements must be arranged as required by the claims. Applicant thus respectfully submits that the rejection of claims 67, 68, 73, 74, 76, and 78 should be withdrawn.

### **Rejections Under 35 U.S.C. § 103**

Applicants traverse the rejection of claims 67, 68, 72-74, and 76-78 under 35 U.S.C. § 103(a) as being unpatentable over Schneider in view of Choquette for at least the reason that the Examiner has not established that the cited references, either alone or in combination, disclose or suggest each and every element of the claimed invention. For example, independent claim 67 recites “the insulation layer situated between the second mirror and the substantially equipotential layer such that the second mirror and the substantially equipotential layer are separated from each other.” Independent claim 74 includes a similar recitation.

As admitted in the Office Action, “Schneider does not teach an insulating layer ... situated between the second mirror and the equipotential layer.” Office Action at 4. The Office Action attempts to remedy this deficiency by characterizing layer 20 of Choquette as an “insulating layer.” Notwithstanding, Figure 1 of Choquette makes clear that layer 20 is located below mirror stack 16, and is therefore not “between the second mirror and the substantially equipotential layer,” as claimed (Emphasis added).

Thus, the Examiner has failed to establish that Choquette discloses or suggests an insulating layer arranged in the fashion required by the claims. Applicant thus respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 67, 68, 72, 73 and 74 at least because the Examiner has failed to establish that the

references, when combined in the purportedly obvious fashion, disclose all the limitations of the rejected claims. Accordingly, the rejection of those claims should be withdrawn.

Applicants traverse the rejection of claims 70 and 71 under 35 U.S.C. § 103(a) as being unpatentable over Ackley in view of Hegblom for at least the reason that the Examiner has not established that those references, whether considered alone or in combination, discloses each and every element of the claimed invention. As discussed above, the Examiner has not established that Ackley discloses or suggests each and every element of independent claim 67. Moreover, the Examiner has not established that Hegblom remedies that deficiency. As such, claim 67 and claims 70 and 71 are allowable at least for the reasons discussed above.

Applicants traverse the rejection of claims 70 and 71 under 35 U.S.C. § 103(a) as being unpatentable over Schneider in view of Choquette and further in view of Hegblom for at least the reason that the Examiner has not established that those references, whether considered alone or in combination, disclose each and every element of the claimed invention. As discussed above, the Examiner has not established that Schneider in view of Choquette discloses or suggests each and every element of independent claim 67. Moreover, the Examiner has not established that Hegblom remedies that deficiency. As such, claim 67 and claims 70 and 71 are allowable at least for the reasons discussed above.

Applicants traverse the rejection of claims 75, 79, and 80 under 35 U.S.C. § 103(a) as being unpatentable over Ackley in view of Cox for at least the reason that the Examiner has not established that those references, whether considered alone or in combination, disclose each and every element of the claimed invention. As discussed above, the Examiner has not established that Ackley discloses or suggests each and every element of independent claim 74. Moreover, the Examiner has not established that Hegblom remedies that deficiency. As such, claim 74 and claims 75, 79, and 80 are allowable at least for the reasons discussed above.

Applicants traverse the rejection of claims 75, 79, and 80 under 35 U.S.C. § 103(a) as being unpatentable over Schneider in view of Choquette and further in view of Cox for at least the reason that the Examiner has not established that cited references, whether considered alone or in combination, disclose each and every element of the claimed invention. As discussed above, the Examiner has not established that Schneider in view of Choquette discloses or suggests each and every element of independent claim 74. Moreover, the Examiner has not

established that Cox remedies that deficiency. As such, claim 74 and claims 75, 79, and 80 are allowable at least for the reasons discussed above.

Finally, Applicants traverse the rejection of claim 77 under U.S.C. § 103(a) as being unpatentable over Ackley in view of Schneider for at least the reason that the Examiner has not established that the references, whether considered alone or in combination, disclose or suggest each and every element of the claimed invention. As previously discussed, the Examiner has not established that either reference discloses or suggests each and every element of independent claim 74. As such, claim 77 is allowable at least for its dependency on claim 74.

### New Claims 81-86

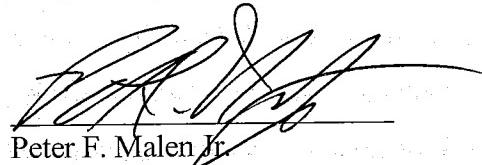
By this paper, Applicant has added new claims 81-86, depending from claim 67. Support for these new claims can be found in the application at Figure 1, and at page 12, line 9 to page 15, line 18. New claims 81-86 are believed to be in allowable condition at least by virtue of their dependence from claim 67, believed to be in allowable condition for at least the reasons set forth herein.

**CONCLUSION**

In view of the discussion and amendments submitted herein, Applicant respectfully submits that each of the pending claims 67-68 and 70-86 is now in condition for allowance. Therefore, reconsideration of the rejections is requested and allowance of those claims is respectfully solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 16<sup>th</sup> day of October, 2006.

Respectfully submitted,



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